

**REMARKS**

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

**Status of the Claims:**

No claims are requested to be canceled.

Claims 46, 54 and 56 are currently being amended.

No claims are being added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 46-89 are now pending in this application.

**Objections to Claims:**

Claims 46, 54 and 56 were objected to because the claims state “the sever including:” rather than “the server including:”. Claims 46, 54 and 56 have been amended to correct this informality. Applicant respectfully requests the withdrawal of the objections to claims 46, 54 and 56.

**Claim Rejections – 35 U.S.C. § 102(e):**

Claims 46, 47, 51, 53 57, 58, 62, 64, 68, 69, 73, 75, 79, 80, 84 and 86 were rejected under 35 U.S.C. § 102(e) as being anticipated by Rao et al. (U.S. 6,674,756).

Independent claims, 46, 57, 68 and 79, each recite, “wherein the connection state of a client terminal is represented by two items of control information received from the client terminal; and disconnection means for disconnecting a client terminal when it is decided that the connection state of that client terminal corresponds to the disconnection condition for that client terminal.” In Item 9, the Office Action indicates that Rao discloses that the two items of control information which represent the connection state of the client terminal, received from the client terminal, are an incoming call’s virtual router ID and virtual private network

ID (see column 9, lines 30-32). These pieces of information are disclosed in Rao to be used to provide access to resources that the user is authorized for (see column 9, lines 30-32). However, the incoming call's virtual router ID and virtual private network ID are not used to disconnect the client terminal as recited in independent claim 46.

Additionally, Item 9 of the Office Action states that Rao discloses a disconnection means for disconnecting a client terminal when it is decided that the connection state of that client terminal corresponds to the disconnection condition for that client terminal in the form of a resource manager 38 that disconnects users depending on the Quality of Access (QoA) level (see column 16, lines 46-61). But, the QoA level for an incoming connection is defined in the call policy record 290, not in information received from the client terminal (see column 15, lines 65-67). The QoA level is identified in the call record based on one particular feature of the incoming call such as the type of inlink and phone number (see column 15, line 67; column 16, lines 1-2). Independent claims, 46, 57, 68 and 79, recite two, not one, items of control information received from the client terminal.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Because Rao does not disclose disconnecting a client terminal when it is decided that the connection state represented by two pieces of control information received from the client terminal corresponds to the disconnection condition for that client terminal, Rao does not anticipate independent claims 46, 57, 68 and 79.

Applicant respectfully requests that the rejections of independent claims 46, 57, 68 and 79 under 35 U.S.C. § 102(e) as being anticipated by Rao be withdrawn. Accordingly, Applicant respectfully requests that the rejection of dependent claims 47, 51 and 53; 58, 62 and 64; 69, 73 and 75; and 80, 84 and 86 be withdrawn from their respective dependence on independent claims, 46, 57, 68 and 79.

**Claim Rejections – 35 U.S.C. § 103(a):**

**Rao in view of Dougliis:**

Claims 48, 52, 54, 55, 59, 63, 65, 66, 70, 74, 76, 77, 81, 85, 87 and 88 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rao and further in view of Dougliis et al. (U.S. 6,487,596).

**Claims 48, 52, 59, 63, 70, 74, 81 and 85:**

Dependent claims 48 and 52; 59 and 63; 70 and 74; and 81 and 85 depend from independent claims, 46, 57, 68 and 79, respectively. These independent claims were all rejected under 35 U.S.C. § 102(e) as being anticipated by Rao. As explained above, Rao does not teach the recited limitation, common to these four independent claims, “wherein the connection state of a client terminal is represented by two items of control information received from the client terminal; and disconnection means for disconnecting a client terminal when it is decided that the connection state of that client terminal corresponds to the disconnection condition for that client terminal.” Dougliis discloses implementing a time-out policy when a modem is disconnected after being idle for a time interval during which the modem is unused,  $I$ , where  $I$  exceeds  $M$ , a selected minimum idle time (see column 3, lines 19-23). However,  $I$  is not received from a client terminal (i.e., a modem in a client terminal), but measured by a processor associated with a modem in an ISP (see column 3, lines 57-62).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP § 2143.03 (quoting *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). Because neither Rao nor Dougliis teach or suggest the above limitation, these references, in combination, do not render dependent claims 48, 52, 59, 63, 70, 74, 81 and 85 obvious.

Applicant respectfully requests that the rejections of dependent claims 48, 52, 59, 63, 70, 74, 81 and 85 under 35 U.S.C. § 103(a) as being unpatentable over Rao and further in view of Dougliis be withdrawn.

**Claims 54, 65, 76 and 87:**

Independent claims 54, 65, 76 and 87 each recite “retrieval means for retrieving stored disconnection condition information for a client terminal based on a user identifier

transmitted from the client terminal;” and “disconnection means for disconnecting a client terminal when it is decided that the connection state of that client terminal corresponds to the disconnection condition for that client terminal.”

The Office Action in Item 18 indicates that Rao discloses the recited retrieval means and disconnection means (see column 16, lines 46-61). However, Rao describes a quality of access (QoA) level assigned to a user. There is no discussion of a user identifier transmitted from the client terminal. Rao does discuss identifying the QoA level of a call from a record based on one particular feature of the incoming call, such as the type of inlink, phone number, and the like (see column 16, lines 1-4). However, this is an identifier of the call or possibly the client terminal, not the user of the client terminal. Thus, Rao does not teach the feature recited in independent claims 54, 65, 76 and 87, “disconnection condition information for a client terminal based on a user identifier transmitted from the client terminal.”

Independent claims 54, 65, 76 and 87 each recite “wherein the disconnection condition for a client terminal is a non-communication time period during which no packet is communicated between the client terminal and the application server and wherein the disconnection means monitors an arrival time of a packet that includes a transmission address and reception address corresponding to the client terminal and the application server.”

Item 18 of the Office Action discusses that Dougliś describes that the disconnection condition for a client terminal is a non-communication time period during which no packet is communicated between the client terminal and the application server and that the disconnection means monitors an arrival time of a packet that includes a transmission address and reception address corresponding to the client terminal and the application server (see column 5, lines 32-67). However, Dougliś discloses a connection between the user and other hosts, not an application server (see column 5, lines 32-36). Dougliś further describes that the “telnet session” is between a pair of specific host addresses, not a client terminal address and an application server address (see column 5, lines 34-40). Thus, because Dougliś does not describe communication between the client terminal and the application server, this reference does not disclose the disconnection condition and the disconnection means as claimed in independent claims 54, 65, 76 and 87.

Because neither Rao nor Dougliś teach or suggest any of the claimed retrieval means, the disconnection condition and the disconnection means, these references, in combination,

do not render dependent claims 54, 65, 76 and 87 obvious. Applicant respectfully requests that the rejections of independent claims 54, 65, 76 and 87 under 35 U.S.C. § 103(a) as being unpatentable over Rao and further in view of Dougliis be withdrawn.

Claims 55, 66, 77 and 88:

Independent claims 55, 66, 77 and 88 recite “retrieval means for retrieving stored disconnection condition information for a client terminal based on a user identifier transmitted from the client terminal.”

The Office Action in Item 19 indicates that Rao discloses a retrieval means for retrieving stored disconnection for a client terminal based on a user identifier transmitted from the client terminal (column 16, lines 46-61). However, although Rao points out that users are disconnected in accordance with a quality of access level (QoA), he does not disclose whether they are disconnected based on a user identifier transmitted from the client terminal. Therefore, Rao does not describe the retrieval means recited in independent claims 55, 66, 77 and 88.

Independent claims 55, 66, 77 and 88 further recite “wherein the disconnection condition for a client terminal is a timeout time, the timeout time being stored in conjunction with an address of the application server and a service identifier, and wherein the disconnection means monitors an arrival of a packet that includes the address of the application server and the service identifier, and disconnects the client terminal when a time period that has elapsed since said arrival exceeds the timeout time.”

Item 19 of the Office Action describes Dougliis as disclosing that wherein the disconnection means monitors an arrival time of a packet that includes said address of the application server and the service identifier (column 5, lines 32-67). But, Dougliis describes a “telnet session” between a pair of specific host addresses, such as those of one computer logging into a remote computer (see column 5, lines 32-40). This does not concern monitoring an arrival time of a packet that includes an address of an application server and a service identifier.

The Office Action in Item 19 further indicates that Dougliis states that the disconnection means disconnects the client terminal when a time period that has elapsed after the arrival exceeds the non-communication time period (see column 3, lines 9-26). However,

Douglis does not disclose that the non-communication time period is a timeout time being stored in conjunction with an address of the application server and a service identifier. Thus, Douglis does not teach the disconnection condition and the disconnection means recited in independent claims 55, 66, 77 and 88.

Because neither Rao nor Douglis teach or suggest any of the claimed retrieval means, the disconnection condition and the disconnection means, these references, in combination, do not render dependent claims 55, 66, 77 and 88 obvious. Applicant respectfully requests that the rejections of independent claims 55, 66, 77 and 88 under 35 U.S.C. § 103(a) as being unpatentable over Rao and further in view of Douglis be withdrawn.

**Rao in view of McNamara:**

Claims 49, 50, 56, 60, 61, 67, 71, 72, 78, 82, 83 and 89 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rao and further in view of McNamara (U.S. 6,262,976).

**Claims 49, 50, 60, 61, 71, 72, 82 and 83:**

Dependent claims 49 and 50; 60 and 61; 71 and 72; and 82 and 83 depend from independent claims, 46, 57, 68 and 79, respectively. These independent claims were all rejected under 35 U.S.C. § 102(e) as being anticipated by Rao. As explained above, Rao does not teach the recited limitation, common to these four independent claims, “wherein the connection state of a client terminal is represented by two items of control information received from the client terminal; and disconnection means for disconnecting a client terminal when it is decided that the connection state of that client terminal corresponds to the disconnection condition for that client terminal.” McNamara discloses that, if a source continues to generate excess packets, the network will disconnect the source (see column 36, lines 50-52). But, McNamara does not describe a disconnection condition state represented by two items of control information received from the client terminal. Because neither Rao nor McNamara teach or suggest the above limitation, these references, in combination, do not render dependent claims 49, 50; 60 61; 71 72; 82 and 83 obvious.

Applicant respectfully requests that the rejections of independent claims 49, 50, 60 61, 71, 72, 82 and 83 under 35 U.S.C. § 103(a) as being unpatentable over Rao and further in view of McNamara be withdrawn.

Claims 56, 67, 78 and 89:

Independent claims 56, 67, 78 and 89 recite “retrieval means for retrieving stored disconnection condition information for a client terminal based on a user identifier transmitted from the client terminal.”

The Office Action in Item 24 indicates that Rao discloses a retrieval means for retrieving stored disconnection for a client terminal based on a user identifier transmitted from the client terminal (column 16, lines 46-61). However, although Rao points out that users are disconnected in accordance with a quality of access level (QoA), he does not disclose whether they are disconnected based on a user identifier transmitted from the client terminal. Therefore, Rao does not describe the retrieval means recited in independent claims 55, 66, 77 and 88. Although McNamara discloses that, if a source continues to generate excess packets, the network will disconnect the source (see column 36, lines 50-52), this reference does not teach or suggest whether they are disconnected based on a user identifier transmitted from the client terminal. Thus, the recited retrieval means is not disclosed in either Rao or McNamara.

Independent claims 56, 67, 78 and 89 additionally recite “wherein a the disconnection means disconnects the client terminal when the data volume of packets that have the transmission address and the reception address exceeds said specified data volume.”

Item 24 of the Office Action further describes McNamara as disclosing that a disconnection means monitors a data volume of packets having said transmission address and said reception address, and disconnects the client terminal when the data volume exceeds a specific data volume (see column 36, lines 42-54). But McNamara describes that, if a source continues to generate excess packets, the network will logically disconnect the source (see column 36, lines 50-52). McNamara is silent on the destination of the packets, much less a reception address of the packets.

Because neither Rao nor McNamara teach or suggest any of the claimed retrieval means and the disconnection means, these references, in combination, do not render independent claims 56, 67, 78 and 89 obvious. Applicant respectfully requests that the rejections of independent claims 56, 67, 78 and 89 under 35 U.S.C. § 103(a) as being unpatentable over Rao and further in view of McNamara be withdrawn.

**Conclusion:**

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By

A handwritten signature in black ink, appearing to read "George C. Beck", is written over a horizontal line.

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